

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEBRASKA

AUTOMATIC EQUIPMENT
MANUFACTURING COMPANY, a Nebraska
company;

Plaintiff/Counter-
Defendant,

and

CREED-MONARCH, INC., A Connecticut
Corporation;

Intervenor/Counter-
Defendant

vs.

DANKO MANUFACTURING, LLC, a
Colorado limited liability company;

Defendant/Counter-
Plaintiff.

8:19-CV-162

MEMORANDUM AND ORDER

I. INTRODUCTION

This matter comes before the Court for the construction of patent claim terms in accordance with *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996). After consideration of the briefing, evidence, oral arguments, and pertinent case law, the Court construes the disputed terms as set forth herein.

II. BACKGROUND

Plaintiff, Automatic Equipment Manufacturing Company doing business as Blue Ox (“Blue Ox”) and Intervenor, Creed-Monarch, Inc., (“Creed-Monarch”)¹ seek a declaratory judgment to the effect that Defendant’s, Danko Manufacturing, LLC’s (“Danko’s) patent for a

¹ Plaintiff Blue Ox and intervenor Creed-Monarch assert the same interests in this lawsuit and submitted combined briefing on all matters relating to claim construction. Accordingly, the Court will jointly refer to them as “Plaintiffs.”

towed-vehicle brake detection system is invalid. [Filing 4 at 2](#). Danko filed a counterclaim alleging Plaintiffs infringed on said patent. [Filing 8 at 11-14](#).

The patent at the center of the dispute is U.S. Patent No. 10,137,870 (“the ’870 Patent”) which was issued by the U.S. Patent and Trademark Office on November 27, 2018, and which is presently assigned to Danko. [Filing 4-1 at 2](#). The ’870 Patent describes a brake-lock detection system. [Filing 4-1 at 2](#). It is used when one vehicle is towing another, and the user wishes to employ both the towing and towed vehicles brakes. [Filing 4-1 at 11](#). To do so, the user installs an auxiliary brake activation system in the towed vehicle which serves to activate the towed vehicles brakes at the same time as the towing vehicle brakes. [Filing 4-1 at 11](#). The invention described in the ’870 Patent “relates to . . . a structure and method for detecting when the brakes of a towed vehicle are locked by a brake activation system.” [Filing 4-1 at 11](#). The patent’s abstract describes the structure and method as follows:

Brake lock detection is described for a brake activation system. In one example, a main housing is configured to engage an interior surface of a towed vehicle near a brake pedal of the towed vehicle. An actuation arm extends away from the main housing configured to connect to the brake pedal to actuate a brake of the towed vehicle through the brake pedal. An arm, drive system of the main housing applies a positive pressure to the actuation arm when activated to drive the brake pedal to actuate the brake. A negative pressure sensor generates a negative pressure signal when the brake pedal applies a negative pressure opposite the positive pressure to the actuation arm and the actuation arm is not activated.

[Filing 4-1 at 2](#). The following figure depicts the invention:

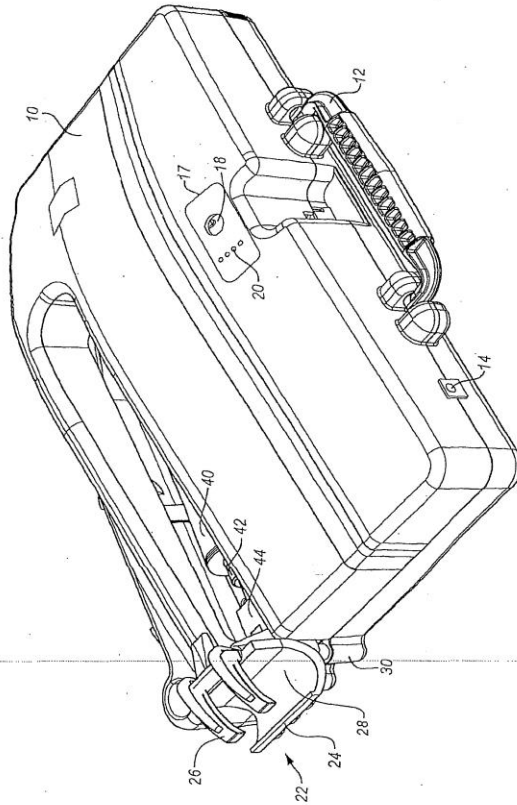
U.S. Patent

Nov. 27, 2018

Sheet 1 of 7

US 10,137,870 B2

FIG. 1



[Filing 4-1 at 4.](#)

The parties filed their joint claim construction charts and prehearing statement on November 15, 2019, and identified twenty disputed claim terms. [Filing 31](#); [Filing 31-1](#); [Filing 31-2](#). The parties also filed simultaneous opening claim construction briefs on January 24, 2020. Defendant's brief addressed each of the twenty disputed claim terms in separately numbered subsections. [Filing 33 at 19-40](#). Plaintiff and Intervenor's Brief did not separately address each claimed term, and also discussed a term not included in the parties' joint claim construction charts

and prehearing statements, namely. [Filing 35 at 15](#). Plaintiff and Intervenor also stated that they no longer disputed and were willing to adopt Defendant's proposed construction for nine of the twenty claim terms. [Filing 35 at 12](#). Plaintiff and Intervenor concluded their claim construction brief by stating, "The basis and argument for the other contested terms will be presented during the Markman Hearing." [Filing 35 at 18](#).

Defendant filed a Motion to Strike portions of Plaintiffs' claim construction brief. [Filing 36](#). The Court granted the Motion in part, finding Plaintiffs were not permitted to present their late-filed claim term and finding that they had agreed to adopt Danko's construction for nine of the original twenty disputed terms.

Accordingly, there are eleven remaining disputed claim terms at issue: 1) "means for actuating a brake pedal of the towed vehicle," 2) "means for driving the means for actuating by applying a positive pressure to the means for actuating to drive the brake pedal," 3) "means for sensing a negative pressure to generate a negative pressure signal," 4) "actuation arm when activated . . . actuation arm is not activated," 5) "an arm drive system of the main housing to apply a positive pressure to the actuation arm when activated," 6) "negative pressure sensor," 7) "mechanical switch," 8) "controller is further for sending a fault signal in response to receiving the negative pressure signal," 9) "controller is further for sending the fault signal," 10) "driving the actuation arm toward the main housing away from the brake pedal to apply a negative pressure to the brake pedal in response to declaring the fault," and 11) "means extending away from the means for engaging and configured to connect to the brake pedal."

The Court held a *Markman* hearing on June 29, 2020. Filing 48. The parties appeared and presented evidence and oral argument. The Court took the matter and an evidentiary objection

under advisement. Having reviewed the specification, the patent prosecution history, the parties' arguments, and the evidence at the hearing, the Court now issues its claim-construction order.

III. ANALYSIS

A. Standard of Review

"[C]laim construction falls 'exclusively within the province of the court,' not that of the jury." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 325, 135 S. Ct. 831, 837, 190 L. Ed. 2d 719 (2015) (quoting *Markman*, 517 U.S. at 372, 116 S. Ct. at 1384). A claim construction order will "dictate[] how the court will instruct the jury regarding a claim's scope." *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1359 (Fed. Cir. 2008). In construing a claim term, the Court must give, to the extent possible, each term its "ordinary and customary meaning, as [it] would be understood by one of ordinary skill in the art in question at the time of the invention." *Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1287 (Fed. Cir. 2010) (citing *Phillips*, 415 F.3d at 1312-13).

Thus, it is proper for courts to "treat the ultimate question of the proper construction of the patent as a question of law in the way that [courts] treat document construction as a question of law." *Teva Pharm. USA, Inc.*, 574 U.S. at 325, 331, 135 S. Ct. at 837, 841, 190 L. Ed. 2d 719 (noting that when the court relies solely upon the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court's construction is a determination of law, however, underlying factual determinations are reviewed for clear error).

B. Evidentiary Issues

At the *Markman* hearing, Plaintiffs objected to the admission of certain pages of Danko's demonstrative exhibit, a PowerPoint presentation, because the pages referenced "literal infringement." Plaintiffs argued the question of whether infringement had occurred was an issue

for an eventual jury and thus premature at the stage of claim construction. Danko agreed to have the objected-to references on pages 26, 28, 32, and 36 of the exhibit stricken. [Filing 52](#). Accordingly, the Court will not consider the objected-to portions of pages 26, 28, 32, and 36 of Exhibit 52.

Additionally, Danko objected to Plaintiffs' Exhibits 103 and 122. Plaintiffs withdrew their offer of Exhibit 122 and it was not received into evidence. On the record, the Court overruled Danko's objection to Exhibit 103 and admitted it into evidence.

C. Construction of Disputed Claim Terms

The parties dispute the correct construction of the eleven claim terms set forth above. Having examined the disputed claim terms and applying the relevant case law, the Court construes the eleven disputed terms as set forth in detail herein.

The purpose of claim construction is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). “It is, of course, ‘a bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Medegen MMS, Inc. v. ICU Medical, Inc.*, 317 F. App'x 982, 986 (Fed. Cir. 2008) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005)). The process of construing a claim term begins with the words of the claims. *Phillips*, 415 F.3d at 1312–14; *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “[A]bsent contravening evidence from the specification or prosecution history, plain and unambiguous claim language controls the construction analysis.” *DSW, Inc. v. Shoe Pavilion, Inc.*, 537 F.3d 1342, 1347 (Fed. Cir. 2008). However, the claims “must be read in view of the specification, of which they are a part.” *Phillips*, 415 F.3d at 1315 (quoting *Markman*, 52 F.3d at 979); see *Tempo Lighting, Inc. v. Tivoli, LLC*, 742

F.3d 973, 977 (Fed. Cir. 2014) (stating in claim construction, the court “gives primacy to the language of the claims, followed by the specification”). Furthermore, because “the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.” *Phillips*, 415 F.3d at 1323.

If a claim term remains ambiguous after an examination of intrinsic evidence, the court “may look to extrinsic evidence to help resolve the lack of clarity.” *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001). Extrinsic evidence includes expert and inventor testimony, dictionaries, and learned treatises. *Phillips*, 415 F.3d at 1317. Extrinsic evidence is less reliable and less persuasive than intrinsic evidence since such evidence is not part of the patent and was not created concurrently with the prosecution of the patent. *Id.* at 1317-19; *Summit 6, LLC v. Samsung Electronics Co.*, 802 F.3d 1283, 1290 (Fed. Cir. 2015) (“Although courts are permitted to consider extrinsic evidence, like expert testimony, dictionaries, and treatises, such evidence is generally of less significance than the intrinsic record.”). “Extrinsic evidence may not be used ‘to contradict claim meaning that is unambiguous in light of the intrinsic evidence.’” *Summit 6, LLC*, 802 F.3d at 1290 (quoting *Phillips*, 415 F.3d at 1324). With these principles in mind, the Court examines the disputed claim terms in turn.

1. Means for Actuating a Brake Pedal of the Towed Vehicle

Claim 13 states the invention encompasses “[a] brake controller comprising . . . means for actuating a brake pedal of the towed vehicle, the means extending away from the means for engaging and configured to connect to the brake pedal.” [Filing 4-1 at 17](#). Plaintiffs propose the phrase “means for actuating a brake pedal of the towed vehicle” in this claim is a “means plus function [term] encompassing a piston rod . . . with a hinged connection . . . connected to a brake pedal connector base.” [Filing 31-1 at 4](#). Danko agrees it is a means-plus-function term but argues

it should be construed as “[t]he actuation arm . . . and equivalents thereof for actuating the brake pedal.” [Filing 31-2](#) at 2; [Filing 33 at 23](#). The Court adopts Danko’s proposed construction.

A claim term is a “means-plus-function” term when it is drafted in a manner that invokes 35 U.S.C. § 112(f):

Element in Claim for a Combination. -- An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112(f). This provision “allow[s] patentees to express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function” but also “restrict[s] the scope of coverage to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347 (Fed. Cir. 2015).

When the claim term contains the word “means,” there is a presumption it is a means-plus-function term. *See id.* at 1348. (“[T]he use of the word ‘means’ in a claim element creates a rebuttable presumption that § 112, para. [f] applies.” (citing *Personalized Media Commc’ns, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 703–04 (Fed. Cir. 1998))). However, the ultimate test for whether any claim term, with or without the word “means” is a term under § 112(f) “is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Id.* at 1349 (citing *Greenberg v. Ethicon Endo–Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996)). In analyzing whether the claim term “recites sufficient structure, ‘it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function.’” *Skky, Inc. v. MindGeek, s.a.r.l.*,

859 F.3d 1014, 1019 (Fed. Cir. 2017) (quoting *TecSec, Inc. v. Int'l Bus. Machs. Corp.*, 731 F.3d 1336, 1347 (Fed. Cir. 2013)).

Here, the Court agrees this is a means-plus-function term under 35 U.S.C. § 112(f). The term itself contains the word “means” and it is apparent that a person of ordinary skill in the art would understand it to refer to the structure of the means for actuating a brake pedal of the towed vehicle. *See Williamson*, 792 F.3d at 1349. As to the parties’ proposed constructions, Plaintiffs’ proposed term engrafts requirements for specific structures onto the means which is antithetical to the purpose of a means-plus-function term. In particular, Plaintiffs’ proposed construction requires that the means in question “encompass[] a piston rod,” a “hinged connection” and a “brake connector base.” [Filing 31-1](#) at 4. These are specific embodiments and including them in the construction would unnecessarily limit the definition and would not comport with § 112(f)’s requirement that a means-plus-function term encompass “equivalents thereof.” Danko’s proposed construction (“The actuation arm . . . and equivalents thereof for actuating the brake pedal”) accurately describes the means-plus-function embodied by the disputed term without unnecessary limitations and the Court therefore adopts its construction.

2. Means for Driving the Means for Actuating by Applying a Positive Pressure to the Means for Actuating to Drive the Brake Pedal

Claim 13 states the brake controller is comprised, in part, of a “means for driving the means for actuating by applying a positive pressure to the means for actuating to drive the brake pedal to actuate a brake of the towed vehicle.” [Filing 4-1 at 17](#). Plaintiffs argue the term “means for driving the means for actuating by applying a positive pressure to the means for actuating to drive the brake pedal” should be construed as a means-plus-function term encompassing a pneumatic cylinder hingedly attached to the main housing and piston attached to the piston rod at least

partially disposed inside the pneumatic cylinder driven by an air compressor, valve array, and tank. [Filing 31-1 at 4-5](#); [Filing 35 at 14](#); [Filing 38 at 7](#). Danko proposes the claim term be construed as “[t]he cylinder . . . and equivalents thereof for imparting the positive pressure to the means for actuating.” [Filing 31-2 at 2](#). The Court declines to adopt either party’s proposed construction.

The Court agrees this is a means-plus-function term, but again finds Plaintiffs’ proposed construction unduly restricts the term to particular embodiments rather than encompassing equivalents thereof as required for a term under § 112(f). However, Danko’s proposed construction is also too narrow. While Danko believes the means referenced in this term apply only to the “cylinder and equivalents,” the Court finds that the rod which functions in conjunction with the cylinder is also part of the means which drive the means for actuating by applying a positive pressure to the means for actuating to drive the brake pedal. Thus, the court construes this claim term to mean “the cylinder and rod and equivalents thereof for imparting the positive pressure to the means for actuating to drive the brake pedal.”

3. Means for Sensing a Negative Pressure to Generate a Negative Pressure Signal

Claim 13 states the brake controller is comprised, in part, of a “means for sensing a negative pressure to generate a negative pressure signal when the brake pedal applies a negative pressure to the means for actuating.” [Filing 4-1 at 17](#). Plaintiffs argue the phrase “means for sensing a negative pressure to generate a negative pressure signal” is a means-plus-function term which should be construed as

encompassing a mechanical switch mounted to an anchor attached to the pneumatic cylinder and electrically wired to a controller by a connection, a switch slide disposed to selectively press against the switch having legs extending into elongated holes that hold a pin that attaches the pneumatic cylinder to the anchor, a switch surface to selectively activate the switch and a set of springs that normally bias the switch slide and, the switch in an open position.

[Filing 31-1 at 5](#).

Danko argues the term should be construed as “[t]he brake sensor . . . and equivalent thereof for sensing the negative pressure.” [Filing 31-2 at 3](#); [Filing 33 at 26](#); [Filing 37 at 6](#). The Court agrees with Danko’s proposed construction.

The Court concludes this is a means-plus-function term within the meaning of § 112(f). Plaintiffs’ proposed construction engrafts a number of requirements not in the claim while also excluding equivalents thereof. For example, Plaintiff’s proposed construction requires that the switch be mechanical, that the cylinder be pneumatic, and that the switch be activated by a set of open-biased springs. This is in contravention to § 112(f)’s requirements and the Court accordingly rejects Plaintiffs’ proposed construction. Danko’s proposed construction, on the other hand, adequately describes the means and function while also accommodating equivalents that are either expressly disclosed or that a skilled artisan would understand to exist having read the entire specification.

Accordingly, the Court adopts Danko’s proposed construction and construes this term to mean “the brake sensor and equivalent thereof for sensing the negative pressure.”

4. Actuation Arm When Activated . . . Actuation Arm Is Not Activated

Claim 1 states the brake controller is comprised in part of “[a]n arm drive system of the main housing to apply a positive pressure to the actuation arm when activated to drive the brake pedal to actuate the brake” and “a negative pressure sensor to generate a negative pressure signal when the brake pedal applies a negative pressure to the actuation arm and the actuation arm is not activated.” [Filing 4-1 at 17](#). Plaintiffs contend the claim terms “actuation arm when activated” and “actuation arm is not activated” contained in this claim should be construed as meaning “[a]ctuation arm is activated when the brake controller is properly installed.” [Filing 31-1 at 2](#). Danko contends its construction should be, “The actuation arm is activated when the arm drive

system has positioned the actuation arm to impart the positive pressure against the brake pedal. The actuation arm is not activated when the arm drive system has positioned the actuation arm to not impart the positive pressure against the brake pedal.” [Filing 31-2 at 4-5](#). The Court adopts Danko’s proposed construction.

The parties’ proposed definitions are not necessarily contradictory, but Danko’s is more accurate because it fully describes the operation of the brake controller in relation to the actuation arm. Plaintiff’s proposed construction references only the proper installation of the brake controller. The mere proper installation of the brake controller, while a necessary aspect of the claim term, is not the only element required for the activation or non-activation of the actuation arm. Rather, as explained in Danko’s proposed construction, the properly installed brake controller must operate in relation to the actuation arm being either driven or not driven towards the brake pedal; the described term does not stop with the brake controller’s installation. Accordingly, the Court adopts Danko’s proposed construction of this claim term and construes it to mean “the actuation arm is activated when the arm drive system has positioned the actuation arm to impart the positive pressure against the brake pedal. The actuation arm is not activated when the arm drive system has positioned the actuation arm to not impart the positive pressure against the brake pedal.”

5. An Arm Drive System of the Main Housing to Apply a Positive Pressure to the Actuation Arm When Activated

Claim 1 states the brake controller is comprised of, in part, “an arm drive system of the main housing to apply a positive pressure to the actuation arm when activated to drive the brake pedal to actuate the brake.” [Filing 4-1 at 17](#). Plaintiffs propose the phrase “an arm drive system of the main housing to apply a positive pressure to the actuation arm when activated” in this claim be

construed as a means-plus-function term encompassing “a pneumatic cylinder . . . hingedly attached . . . to the main housing . . . and a piston . . . attached to a piston rod . . . at least partially disposed inside the pneumatic cylinder . . . driven by an air compressor . . . , valve array . . . , and pressure tank.” [Filing 31-1 at 2](#). Danko argues the term is not a means-plus-function term and should be defined as “a system that, when activated, drives or positions the actuation arm to apply the positive pressure.” [Filing 31-2 at 5](#). The Court agrees with Danko’s proposed construction.

The claim term in dispute does not contain the word “means” and thus there is no presumption it is a means-plus-function term. *See Williamson*, 792 F.3d at 1347. However, this does not necessarily mean it is not a means-plus-function term. *See id.* at 1349. “Generic terms such as ‘mechanism,’ ‘element,’ ‘device,’ and other nonce words that reflect nothing more than verbal constructs may be used in a claim in a manner that is tantamount to using the word ‘means’ because they ‘typically do not connote sufficiently definite structure.’” *Id.* at 1350 (quoting *Mass. Inst. of Tech. & Elecs. for Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006)).

Here, the word “system” in the disputed claim term could be such a generic term operating as a stand-in for the word “means” in a means-plus-function term. But the word “system” cannot be read in isolation; importantly, it is preceded by the words “an arm drive.” Unlike a generic “system” which might describes a means, the phrase as a whole, “an arm drive system,” is sufficiently descriptive to define the structure referred to rather than convert the claim term into a means-plus-function term. Accordingly, the Court agrees with and adopts Danko’s propose construction of this disputed claim term and construes this term as “a system that, when activated, drives or positions the actuation arm to apply the positive pressure.”

6. *Negative Pressure Sensor*

Claim 1 states the brake controller is comprised, in part, of “a negative pressure sensor to generate a negative pressure signal when the brake pedal applies a negative pressure to the actuation arm and the actuation arm is not activated.” [Filing 4-1 at 17](#). Claim 4 states another portion of the claimed invention is “[t]he brake controller of claim 1 wherein the negative pressure sensor comprises a mechanical switch.” [Filing 4-1 at 17](#). The parties dispute the meaning of the term “negative pressure sensor” in these claims. The Court declines to construe this term and instead gives it its ordinary meaning.

Plaintiffs’ proposed construction is:

Mechanical switch mounted to an anchor attached to the pneumatic cylinder and electrically wired to a controller by a connection, a switch slide disposed to selectively press against the switch having legs extending into elongated holes that hold a pin that attaches the pneumatic cylinder to the anchor, a switch surface to selectively activate the switch and a set of springs that normally bias the switch slide an the switch in an open position.

[Filing 31-1 at 2-3](#). Danko proposes giving the claim term its ordinary meaning of “a sensor configured to sense an existence of the negative pressure.” [Filing 31-2 at 5-6](#).

Plaintiffs’ proposed construction improperly imports illustrative embodiments from the specification that are not part of the claim. For example, the claim does not require that the switch must be mechanical, that the cylinder must be pneumatic, that there must be electric wiring, or that the biasing device must be a spring. *See generally* [Filing 4-1](#). Furthermore, after putting forth this proposed construction in their opening claim construction brief, Plaintiffs conceded in their reply brief that they “agree [this] . . . term[] can be constructed as having plain and ordinary meaning in the context of the ’870 patent specification.” [Filing 38 at 12](#).

“[A] district court is not obligated to construe terms with ordinary meanings, lest trial courts be inundated with requests to parse the meaning of every word in the asserted claims.” *O2 Micro Int’l Ltd.*, 521 F.3d at 1360. The words of a claim are generally given their ordinary and

customary meaning, which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1313. “In some cases, the ordinary meaning of claim language . . . may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

The Court finds no construction of this term is necessary as Danko asserted and as Plaintiffs conceded in later briefing that none is required. Accordingly, the Court declines to construe the term “negative pressure sensor” and instead concludes the term should be given its ordinary meaning.

7. *Mechanical Switch*

Claim 4 states what is claimed is, in part, “[t]he brake controller of claim 1 wherein the negative pressure sensor comprises a mechanical switch.” [Filing 4-1 at 17](#). The parties dispute the construction of the term “mechanical switch.”

Plaintiffs propose the following construction:

A multiple position member or push button movable between a normally biased open position and a selectively closed position such that when the multiple position member or push button is moved from the normally biased open position to the selectively closed position in response to a force applied against the multiple position member, the multiple position member completes an electric loop or path.

[Filing 31-1 at 3-4](#). Danko, on the other hand, argue the term requires no construction and should be given its plain meaning. [Filing 31-2 at 6](#). Furthermore, in its reply brief, Plaintiffs again concede that Danko is correct. [Filing 38 at 12](#).

Based on Plaintiffs’ concession and the fact that a person of ordinary skill in the art would understand this term’s plain meaning, the Court concludes no construction of this claim term is

necessary. Accordingly, the term “negative pressure sensor” is given its plain and ordinary meaning.

8. *Controller Is Further for Sending a Fault Signal in Response to Receiving the Negative Pressure Signal*

Claim 15 states the claim includes, in part, “The brake controller of claim 14, wherein the controller is further for sending a fault signal in response to receiving the negative pressure signal when the controller is not activating the means for actuating.” [Filing 4-1 at 17](#). Plaintiffs argue the term “controller is further for sending a fault signal in response to receiving the negative pressure signal” in this claim is indefinite and not enabled under 35 § U.S.C. 112(a). [Filing 31-1 at 5-6](#); [Filing 35 at 16](#). Danko argues the term should be given its ordinary meaning because “controller” is a well-known term in the electronics arts. [Filing 31-2 at 6](#); [Filing 33 at 38](#). The Court finds the term does not fail under § 112(a) and no construction of it is necessary.

Section 112(a) requires that a patent specification contain an adequate written description and that it enable an artisan to make the invention:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

35 U.S.C. § 112(a); *see also Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (describing written description requirement and enablement requirement). As to the written description requirement, “the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Id.* (quoting *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991)). As to the enablement requirement, “§ 112 requires that the specification of a

patent must enable a person skilled in the art to make and use the claimed invention.” *In re Wands*, 858 F.2d 731, 735 (Fed. Cir. 1988).

Plaintiffs argue this term fails the definiteness and enablement requirements “[d]ue to the total lack of essential details of logic and system operation” in the reference to a “controller.” [Filing 35 at 16](#). The Court disagrees the term lacks an adequate written description or fails the enablement requirement. The specification describes this claim phrase in greater detail by means of a flowchart, Figure 10, which demonstrates that the controller determines whether the negative pressure signal has been received from the braking system control signal. [Filing 4-1 at 10](#). Furthermore, the specification’s detailed description would enable a reasonably skilled artisan to make the controller in question, thus satisfying the enablement requirement. The Court further agrees with Danko that the claim term in question does not require construction and should be given its ordinary meaning.

9. Controller Is Further for Sending the Fault Signal

Claim 16 states the invention includes, “[t]he brake controller of claim 15, wherein the controller is further for sending the fault signal to a remote display.” [Filing 4-1 at 17](#). Plaintiffs again argue this claim term is indefinite and not enabled based on its use of the term “controller” as set forth in Section III.C.8 above. Danko argues the term should be given its ordinary meaning.

The parties’ arguments are no different than those advanced for the claim term “controller is further for sending a fault signal in response to receiving the negative pressure signal,” which the Court already concluded met the requirements of § 112(a) did not need to be construed. For the same reasons, the Court declines to construe this claim term and instead gives it its plain and ordinary meaning.

10. Driving the Actuation Arm Towards the Main Housing Away from the Brake Pedal to Apply a Negative Pressure to the Brake Pedal in Response to Declaring the Fault

Claim 20 references “[t]he method of claim 17, further comprising driving the actuation arm towards the main housing away from the brake pedal to apply a negative pressure to the brake pedal in response to declaring the fault.” [Filing 4-1 at 17](#). Plaintiffs argue the term is indefinite under § 112(a), [Filing 31-1 at 6](#), while Danko argues the term should be given its ordinary meaning. [Filing 31-2 at 6](#).

The Court finds no construction of this claim term is necessary. Plaintiffs advance no rationale or explanation for their claim of indefiniteness. *See generally* [Filing 35](#). The specification is clear that when a fault is declared, the arm moves away from the brake pedal. *See* [Filing 4-1 at 11-17](#). The meaning of this claim term is therefore plain and need not be construed.

11. Means Extending Away from the Means for Engaging and Configured to Connect to the Brake Pedal

Lastly, claim 13 states the brake controller is comprised, in part, of the “means for actuating a brake pedal of the towed vehicle, the means extending away from the means for engaging and configured to connect to the brake pedal.” [Filing 4-1 at 17](#). Plaintiffs argue this claim term is indefinite and not enabled but advance no argument in their brief to explain why. [Filing 31-1 at 4](#), [Filing 35](#). Defendants argue it is a means-plus-function term meaning “[t]he connector . . . and equivalents therefor for connecting to the brake pedal.” [Filing 31-2 at 7](#); [Filing 33 at 44](#).

The Court agrees this claim is presumptively construed as a means-plus-function term under § 112(f) and finds no evidence that presumption is rebutted. The Court disagrees with Plaintiffs’ unsubstantiated argument that the claim term fails under § 112(a). Figure 3 of the specification illustrates that the portion of the invention which is designed to grip the towed

vehicle's brake pedal is connected to the remainder of the invention which imparts the pressure as set forth in other claim terms above. This meaning is plain and an artisan skilled in the art would be able to produce the device from this description. Accordingly, the Court declines to construe this claim term and concludes the term should be given its ordinary meaning.

IV. CONCLUSION

Accordingly,

IT IS ORDERED:

1. Defendant's Exhibit, [Filing 52](#), is admitted, but the Court will not consider the objected-to portions of pages 26, 28, 32, and 36 of [Filing 52](#);
2. The Court adopts the following constructions of the disputed claim terms in the '870 Patent:
 - a. "Means for actuating a brake pedal of the towed vehicle" is construed as the actuation arm and equivalents thereof for actuating the brake pedal;
 - b. "Means for driving the means for actuating by applying a positive pressure to the means for actuating to drive the brake pedal" is construed as the cylinder and rod and equivalents thereof for imparting the positive pressure to the means for actuating to drive the brake pedal;
 - c. "Means for sensing a negative pressure to generate a negative pressure signal" is construed as the brake sensor and equivalent thereof for sensing the negative pressure;
 - d. "actuation arm when activated . . . actuation arm is not activated" is construed to mean the actuation arm is activated when the arm drive system has positioned the actuation arm to impart the positive pressure against the

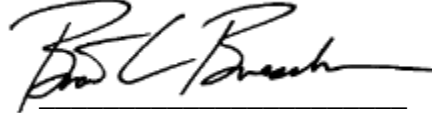
brake pedal. The actuation arm is not activated when the arm drive system has positioned the actuation arm to not impart the positive pressure against the brake pedal;

- e. “An arm drive system of the main housing to apply a positive pressure to the actuation arm when activated” is construed as a system that, when activated, drives or positions the actuation arm to apply the positive pressure;
- f. The court finds no construction is necessary for the claim term “negative pressure sensor”;
- g. The court finds no construction is necessary for the claim term “mechanical switch”;
- h. The court finds no construction is necessary for the claim term “controller is further for sending a fault signal in response to receiving the negative pressure signal”;
- i. The court finds no construction is necessary for the claim term “controller is further for sending the fault signal”;
- j. The court finds no construction is necessary for the claim term “driving the actuation arm toward the main housing away from the brake pedal to apply a negative pressure to the brake pedal in response to declaring the fault”;
- k. The court finds no construction is necessary for the claim term “means extending away from the means for engaging and configured to connect to the brake pedal”; and

3. In accordance with the Court's prior scheduling Order, [Filing 19 at 6](#), within seven (7) days of the date of this Order, the parties shall submit a proposed Scheduling Order for the second phase of the case which sets forth the specific dates for the second phase of discovery consistent with the Joint Status Report and Discovery Plan filed August 8, 2019.

Dated this 14th day of August, 2020.

BY THE COURT:

A handwritten signature in black ink, appearing to read "B. C. Buescher", written over a horizontal line.

Brian C. Buescher
United States District Judge